Joint Primary Aircraft Training System (JPATS)

The Joint Primary Aircraft Training System (JPATS) is a system of primary flight training devices tailored to meet U.S. Air Force and U.S. Navy aircrew requirements. The principal JPATS mission is to train entry-level United States Air Force/United States Navy student pilots in primary flying skills to a level of proficiency at which they can transition into an advanced pilot training track leading to qualification as military pilots, navigators, and naval flight officers. JPATS is designed to replace the U.S. Air Force T-37B and U.S. Navy T-34C aircraft and their associated Ground-Based Training Systems.

The JPATS consists of the T-6A Texan II air vehicles, simulators and associated ground-based training devices, a training integration management system, instructional courseware, and contractor logistics support. The Services will acquire common aircraft and the remaining components will be as common as possible. Logistics support will be tailored to each Service's maintenance concept.

Initial student training began in October 2001 at Moody Air Force Base, Georgia. Both Air Force and Navy students have graduated during the past year. Currently, aircraft are being delivered to Laughlin Air Force Base in Del Rio, Texas, the next entry-level student training base and to the Naval Air Station in Pensacola, Florida, in preparation for navigation flight officer training beginning in Augusts 2003.

TEST & EVALUATION ACTIVITY

A multi-service system level end-to-end test, with a class of entry-level students, began on June 14, 2002, at Moody Air Force Base, Georgia, and concluded on December 12, 2002. The composition of the class was twelve Air Force and five Navy students who were observed throughout the entire course. This was the first time the aircraft and the ground-based components were evaluated as a complete system.

In addition to student training, resolution to some of the previously identified deficiencies are being addressed. Of the safety related deficiencies, two have been potentially corrected. First, the environmental control system (ECS) has been redesigned and installed on production aircraft and is currently under evaluation. It appears the fix was successful. The second deficiency was the ultra-high frequency (UHF) radio being intermittent in certain aircraft attitudes. An additional antenna will be installed on the aircraft as the fix to the UHF radio discrepancy. Testing was completed; however, the fix has not been installed on aircraft at the operating base and has not been evaluated during student training.

Joint Primary Aircraft Training System is designed to replace the U.S. Air Force T-37B and U.S. Navy T-34C aircraft and their associated Ground-Based Training Systems.

TEST & EVALUATION ASSESSMENT

DOT&E's Test and Evaluation Report to Congress, dated November 2001, concluded that the aircraft was operationally effective, with numerous limitations, deficiencies and workarounds, and not operationally suitable. Problem and safety related areas included the engine, ECS, UHF and VHF radio performance, flight manuals and checklists, the emergency oxygen system, ground egress, the trim systems, the power control lever, the wheel brakes, cockpit storage, and rear view mirrors. Some improvements have been noted in the past year, but most of the previously listed deficiencies are not yet corrected.

The aircraft reliability and maintainability is continuously being monitored as a result of the unsuitable rating in the last evaluation. A 25 aircraft, 2,000 flight-hour demonstration at Laughlin Air Force Base will be conducted to assess operational suitability and examine whether the aircraft is meeting contractual requirements. This will be the first opportunity to see if aircraft can achieve the operational tempo that will be required by the Navy. The operational requirements verification plan to conduct the demonstration is in work.

The ground based training system consists of three major components: Aircrew Training Devices (ATDs), the Computer Based Training System (CBTS), and the training integration management system (TIMS). The ATDs are working well with minor deficiencies. There were minimal impacts to student training, but fixes to identified deficiencies have been slow. The Modification and Update Support System (MUSS) is not fully operational. The CBTS is also rated favorably; however, several areas could use improvement. Some of the courseware requires significant rework while another portion exhibits consistency problems and displays erroneous information.

The TIMS is not operationally effective or suitable in its current configuration. The system is still in development although some components have functionality. The functions that are working include: academics, student status, schedule viewer and the gradebook. Functions that require workarounds include the schedule build (flight level only), training forecast schedule, maintenance, and the flight surgeon inputs. Functions not working include the squadron scheduling and qualifications manager. The operational version is not expected to be ready for evaluation until early 2003. Numerous workarounds and real time changes were required to keep the system running during the end-to end evaluation evaluation. The TIMs will be re-evaluated during Follow-on Test and Evaluation.